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BAYESIAN NETWORKS VERSUS OTHER PROBABILISTIC MODELS FOR THE MULTIPLE DIAGNOSIS OF LARGE DEVICES

DELCROIX VÉRONIQUE

LAMIH, Université de Valenciennes et du Hainaut-Cambrésis, Valenciennes, France

MAALEJ MOHAMED-AMINE

LAMIH, Université de Valenciennes et du Hainaut-Cambrésis, Valenciennes, France

PIECHOWIAK SYLVAIN

LAMIH, Université de Valenciennes et du Hainaut-Cambrésis, Valenciennes, France

Received: 11 October 2005

Accepted: 21 October 2006

Multiple diagnosis methods using Bayesian networks are rooted in numerous research projects about model-based diagnosis. Some of this research exploits probabilities to make a diagnosis. Many Bayesian network applications are used for medical diagnosis or for the diagnosis of technical problems in small or moderately large devices. This paper explains in detail the advantages of using Bayesian networks as graphic probabilistic models for diagnosing complex devices, and then compares such models with other probabilistic models that may or may not use Bayesian networks.

Keywords: Bayesian network; probabilistic model; diagnosis

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Karima Sedki, Philippe Polet, Frédéric Vanderhaegen. (2013) Using the BCD model for risk analysis: An influence diagram based approach. *Engineering Applications of Artificial Intelligence*. Online publication date: 1-Jul-2013. [[CrossRef](#)]

KARIMA SEDKI, VÉRONIQUE DELCROIX. (2012) A MODEL BASED ON INFLUENCE DIAGRAMS FOR MULTI-CRITERIA DECISION-MAKING. *International Journal on Artificial Intelligence Tools* **21**:04, . Online publication date: 1-Aug-2012. [[Abstract](#)] [[PDF \(1234 KB\)](#)] [[PDF Plus \(861 KB\)](#)]

C. Bielza, G. Li, P. Larrañaga. (2011) Multi-dimensional classification with Bayesian networks. *International Journal of Approximate Reasoning* **52**:6, 705-727. Online publication date: 1-Sep-2011. [[CrossRef](#)]

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